Bottling a Water Sample for Classroom Testing

Field Guide

Task

Bottle a water sample to take back to the classroom for testing pH, conductivity or salinity, alkalinity, and nitrate.

What You Need

- ❑ 500-mL polyethylene bottle with lid
- ❑ Permanent marker
- ❑ Masking tape

In the Field

1. Label a 500-mL polyethylene bottle with your school's name, the teacher's name, the site name, the date and time of collection.
2. Rinse the bottle and cap with sample water 3 times.
3. Fill the bottle with sample water until the water forms a dome shape at the top of the bottle so that, when the cap is put on, no air is trapped inside.
4. Put on the cap and seal the cap of the bottle with masking tape.

   Note: Tape serves as a label, and an indicator of whether the bottle has been opened. Tape should NOT be in contact with the water sample itself.
5. Store these samples in a refrigerator at about 4° C until they can be tested (within 2 hours for pH and nitrate and within 24 hours for alkalinity and salinity or electrical conductivity).
6. Once the seal is broken, first do the test for salinity or electrical conductivity, then pH, then nitrate test, and then alkalinity. The sample will need to reach 20° - 27° C before testing for electrical conductivity. Ideally, all the measurements should be performed during the same lab session.